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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/665,949

09/18/2003

Uwe Schneider

9365

6525

27752 7590 03/22/2007

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EXAMINER

MUSSER, BARBARA J

ART UNIT

PAPER NUMBER

1733

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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3 MONTHS

03/22/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

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<b>Office Action Summary</b>	<b>Application No.</b> 10/665,949	<b>Applicant(s)</b> SCHNEIDER ET AL.	
	<b>Examiner</b> Barbara J. Musser	<b>Art Unit</b> 1733	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 02 February 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,2,4,5 and 8-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,4,5 and 8-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 2, and 8-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Roe et al.(U.S. Patent 5,776,121) in view of Sabee(U.S. Patent 4,968,313).

Roe et al. discloses applying a stretched elastic(76) to the edge of a diaper, cutting the diaper to form side flaps, folding and bonding the side flaps onto the main portion of the diaper.(Figures 4 and 7; Col. 3, ll. 20-25; Col. 10, ll. 17-20) The reference does not disclose incrementally stretching the portion of the diaper having the elastic prior to folding it. Sabee discloses applying elastic to the edges of a diaper and incrementally stretching it as an alternative to applying a stretched elastic to the diaper.(Figure 12; 89; Col. 1, ll. 42-45) This greatly simplifies the imparting of elastic characteristics to diapers.(Col. 1, ll. 38-56; Col. 2, ll. 19-22) It would have been obvious to one of ordinary skill in the art at the time the invention was made to form the diaper of Roe et al. by applying the elastic to the diaper and then incrementally stretching it as suggested by Sabee(Col. 2, ll. 19-22) since this would simplify the process of imparting elastic to the diaper instead of the use of the more complicated process of applying stretched elastic suggested by Roe et al.(Col. 10, ll. 17-20)

Regarding the limitation of bonding along all of the folded length, Roe et al. discloses forming folds which act to form upright barrier cuffs(Figure 5B) having an adhesive to join one portion of the diaper to another to form the cuffs. The reference indicates the bonding material is applied along a line connecting the ends of the cuts.(Col. 14, ll. 21-30) While the reference does not explicitly state the adhesive is along the entire length of the fold, since the adhesive effectively forms the barrier cuff by bonding the layers together so an upstanding portion is formed(Figure 5B), one in the art would appreciate that the adhesive extended the entire length of the fold since the upstanding portion would not be formed where the diaper was not bonded to itself. Additionally, when referring to the bonding of this portion of the diaper, the reference does not suggest that only a portion is bonded, indicating that the entire length is bonded.

Regarding claim 8, Roe et al. discloses the cuts can be curved, indicating the folding would form a curved folded portion.(Col. 12, ll. 50-51)

Regarding claim 9, Sabee discloses using corrugated teeth.(Figure 12; 89)

Regarding claim 10, the bonding can occur via adhesive.(Col. 14, ll. 28-30)

Regarding claims 11 and 12, the article can be a disposable diaper.(Abstract)

Regarding claim 13, since the elastic(59) is along the portion of the longitudinal edge between the side panels, the activation of said elastic would be performed along that same portion of the longitudinal edge.(Figure 4)

Regarding claim 14, the folding occurs at least between the side panels.(Figure 4)

Regarding claim 15, the bonding occurs between the side panels.(Figure 5A)

3. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Roe et al. and Sabee as applied to claim 1 above, and further in view of Anderson et al.(U.S. Patent 6,605,172)

Sabee does not disclose the specifics of whether the side flaps are heated prior to or during the stretching process. Anderson et al. discloses that heating a web during the incremental stretching improves the liquid imperviousness of the web.(Col. 15, ll. 48-56) It would have been obvious to one of ordinary skill in the art at the time the invention was made to heat the elastic and side flaps of Roe et al. and Sabee during the incremental stretching since this would improve the liquid imperviousness relative to stretching without heat.(Col. 15, ll. 48-56)

4. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Roe et al., Sabee and Anderson et al. as applied to claim 4 above, and further in view of Joest et al.(U.S. Patent 5,830,821) and Melius(U.S. Publication 2004/044322A1)

The references cited above do not disclose heating the edges of the garment prior to stretching it to form the gathers. Joest et al. discloses heating an article prior to stretching it.(Figure 1) Melius discloses forming an absorbent article wherein stretching a hot web can enhance the stretching.[0017] It would have been obvious to one of ordinary skill in the art at the time the invention was made to heat the garment of Joest et al. before corrugating(stretching) the edges since it is well-known and conventional in the arts to heat prior to stretching since this allows easier stretching as shown for example by Joest et al.(Figure 1) and as taught by Melius which teaches that stretching

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a hot web enhances the stretching process when forming elastic in an absorbent article.[0017]

5. Claims 1, 2, and 9-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Klemp(U.S. Patent 5,536,350) in view of Sabee(U.S. Patent 4,968,313).

Klemp discloses applying an elastic(28a) to the edge of a diaper, folding the edge, and bonding the entire folded portion to form an edge fold(30). The reference does not disclose incrementally stretching the portion of the diaper having the elastic prior to folding it. Sabee discloses applying elastic to the edges of a diaper and incrementally stretching it as an alternative to applying a stretched elastic to the diaper.(Figure 12; 89; Col. 1, ll. 42-45) This greatly simplifies the imparting of elastic characteristics to diapers.(Col. 1, ll. 38-56; Col. 2, ll. 19-22) It would have been obvious to one of ordinary skill in the art at the time the invention was made to form the diaper of Klemp by applying the elastic to the diaper and then incrementally stretching it as suggested by Sabee(Col. 2, ll. 19-22) since this would simplify the process of imparting elastic to the diaper.

Regarding claim 9, Sabee discloses using corrugated teeth.(Figure 12; 89)

Regarding claim 10, the bonding can occur via adhesive.(30)

Regarding claims 11 and 12, the article can be a disposable diaper.(Abstract)

Regarding claim 13, since the elastic(28) is along the portion of the longitudinal edge between the side panels, the activation of said elastic would be performed along that same portion of the longitudinal edge.(Figure 1)

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6. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Klemp and Sabee as applied to claim 1 above, and further in view of Anderson et al.(U.S. Patent 6,605,172)

Sabee does not disclose the specifics of whether the side flaps are heated prior to or during the stretching process. Anderson et al. discloses that heating a web during the incremental stretching improves the liquid imperviousness of the web.(Col. 15, ll. 48-56) It would have been obvious to one of ordinary skill in the art at the time the invention was made to heat the elastic and side flaps of Klemp and Sabee during the incremental stretching since this would improve the liquid imperviousness relative to stretching without heat.(Col. 15, ll. 48-56)

7. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Klemp, Sabee and Anderson et al. as applied to claim 4 above, and further in view of Joest et al.(U.S. Patent 5,830,821) and Melius(U.S. Publication 2004/044322A1)

The references cited above do not disclose heating the edges of the garment prior to stretching it to form the gathers. Joest et al. discloses heating an article prior to stretching it.(Figure 1) Melius discloses forming an absorbent article wherein stretching a hot web can enhance the stretching.[0017] It would have been obvious to one of ordinary skill in the art at the time the invention was made to heat the garment of Joest et al. before corrugating(stretching) the edges since it is well-known and conventional in the arts to heat prior to stretching since this allows easier stretching as shown for example by Joest et al.(Figure 1) and as taught by Melius which teaches that stretching

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a hot web enhances the stretching process when forming elastic in an absorbent article.[0017]

### ***Response to Arguments***

8. Applicant's arguments filed 2/2/07 have been fully considered but they are not persuasive.

Regarding applicant's argument that Roe et al. does not disclose bonding substantially along the entire length of the fold, the portions of the reference applicant is referring to relate to the bonding of the end edge portions of the fold so that the folded portion will portion will stand up. The inside edge in that case is not intended to be bonded since it is intended to form a cuff perpendicular to the body of the diaper. However, this cuff can be formed by bonding the diaper to itself along the entire fold as in Figure 5B. While the reference does not explicitly state that the diaper is bonded to itself along the entire fold, the purpose of the adhesive(1122) is to form the perpendicular cuff. Without the adhesive, the gasket cuff could unfold as in Figure 5A. Additionally, unlike the portions of the reference referring to bonding portions of the ends of the barrier cuffs, the reference indicates the gasket cuff is formed from two layers of topsheet and two layers of back sheet. Since this gasket cuff extends along the entire fold, and is formed of those four layers, one in the art would appreciate that the fold would be bonded along its entire length since otherwise the gasket cuff would not be formed. (When the two layers are not bonded, the gasket cuff cannot be said to be formed of four layers.)




**Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Barbara J. Musser whose telephone number is (571) 272-1222. The examiner can normally be reached on Monday-Thursday; alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on (571)-272-1226. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
BJM

  
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